

GETTING NIMBLE

CONSERVATION APPROACHES THAT WORK DURING NON-DROUGHT AND DROUGHT CONDITIONS



Jeff Tejral – Denver Water

Nimble

- Quick in movement
- Moving with ease
- Adaptable
- Agile
- Active
- Rapid



Issues facing Denver Water supply



Strontia Springs Reservoir

- Warming climate
- Growth
- Colorado River

The Colorado River



"Bathtub ring" at Lake Powell

No one is more invested in the future of the river than Denver Water.

- Water supply
- Drought on the river
- Hydropower and environmental issues

Warming climate



Climate change means water change

Growth



Infrastructure must be included in future growth planning

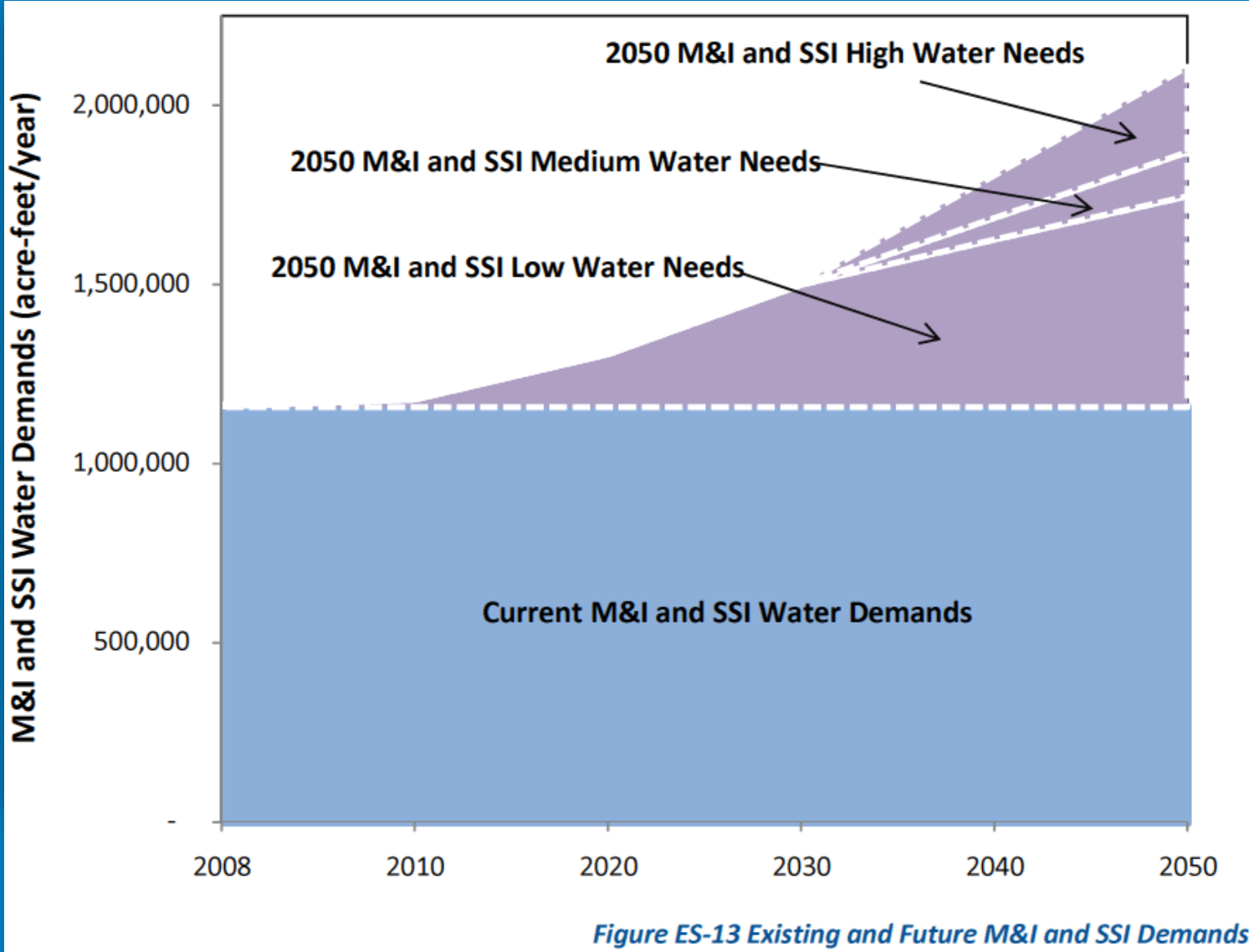
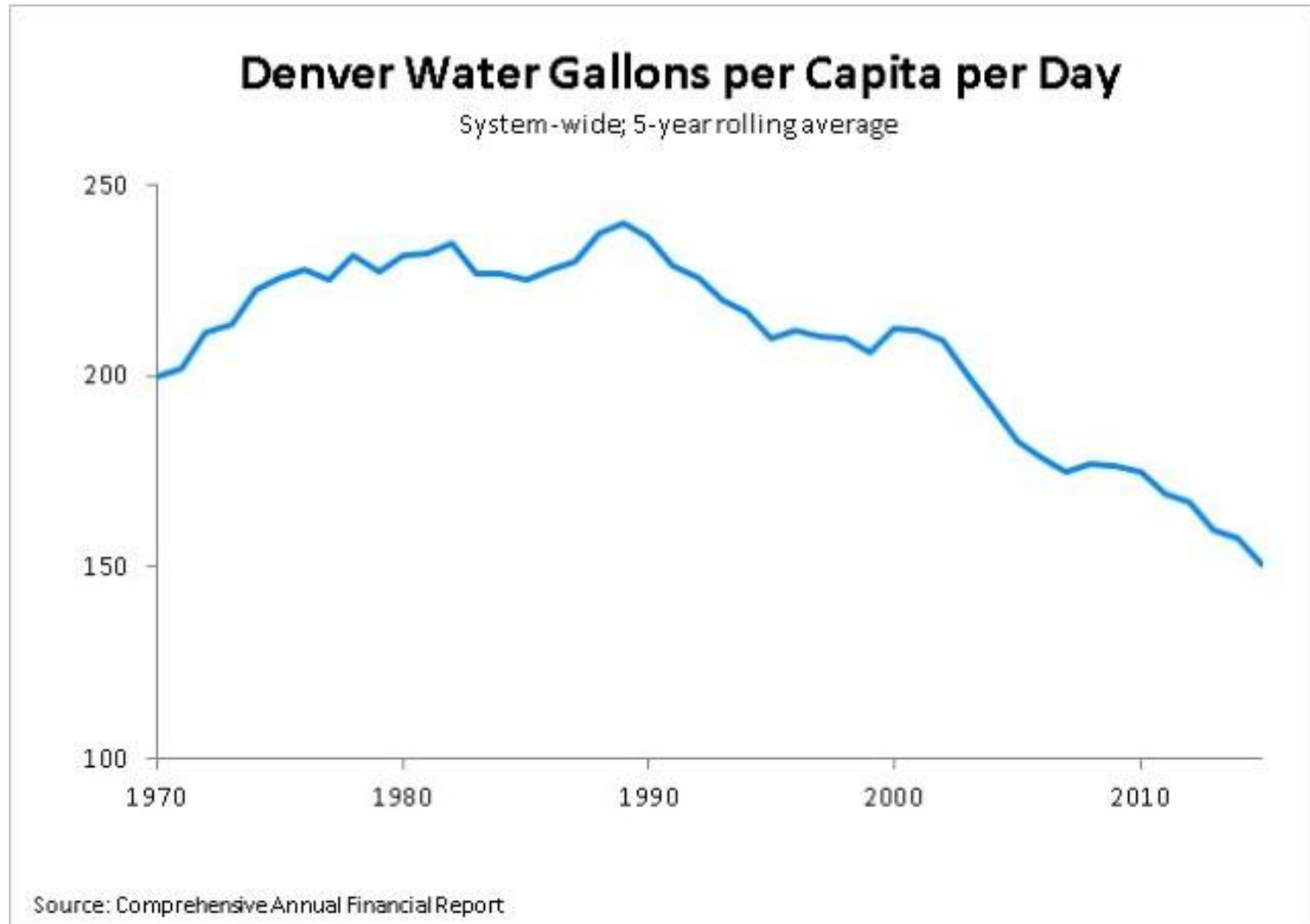


Figure ES-13 Existing and Future M&I and SSI Demands

Demand patterns Change



What will the next drought look like?



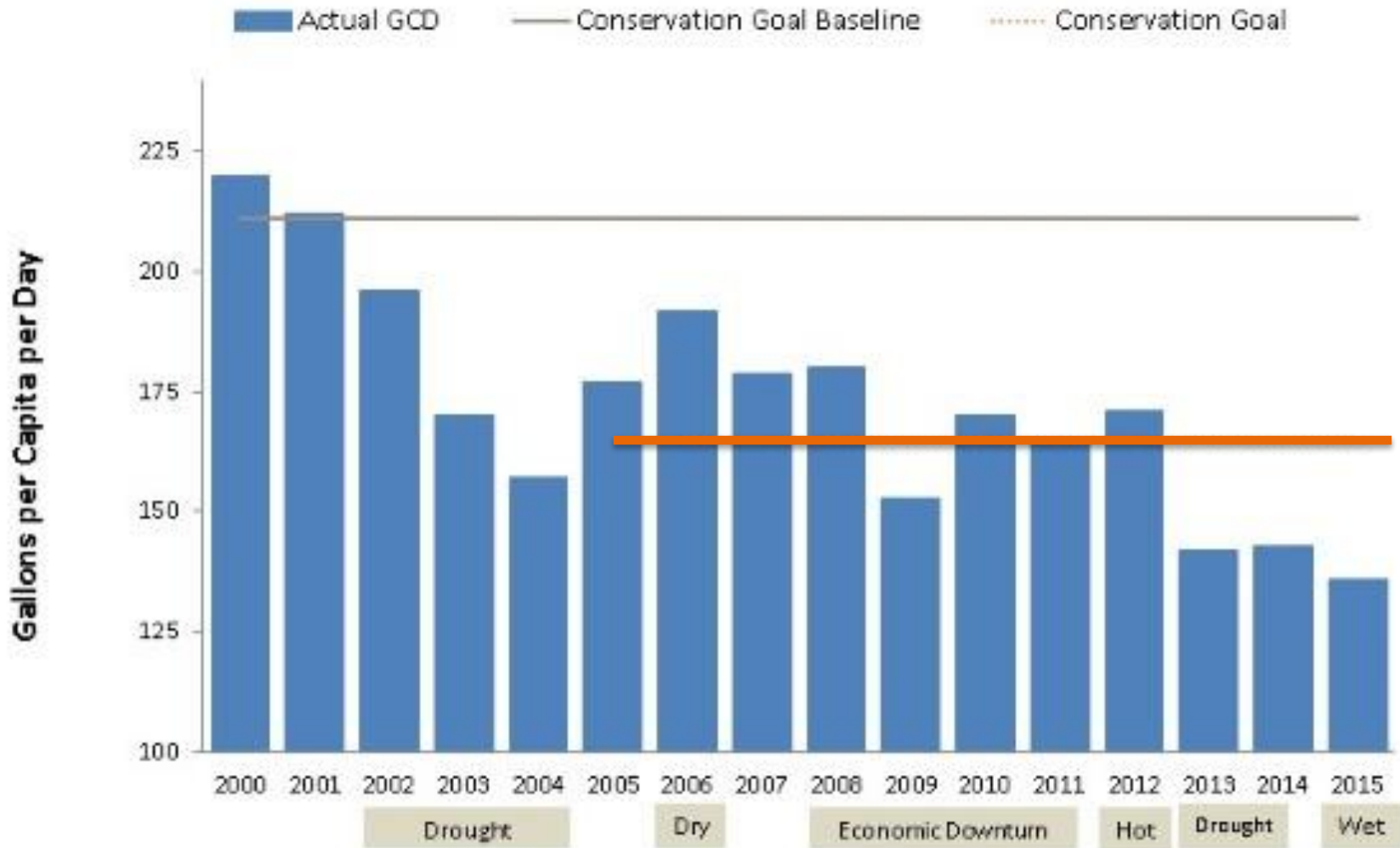
Drought: Opportunity Disguised As Work

Goals

Programs

Messaging

Daily per Capita Use (GCD)







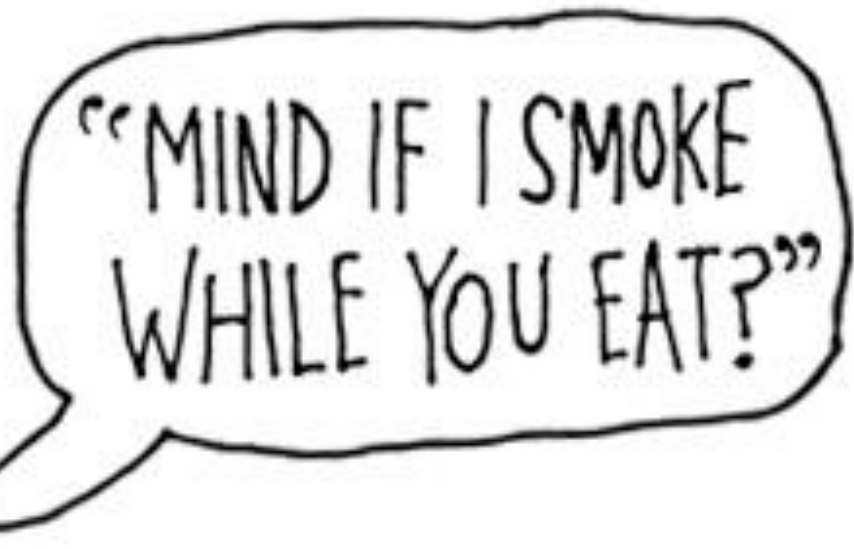


Strong Message









LEAKS AREN'T COOL.

Learn how to fix them >

THE OFFICIAL DISHWASHER OF SUMMER 2013.



USE
EVEN
LESS.™

 DENVER WATER

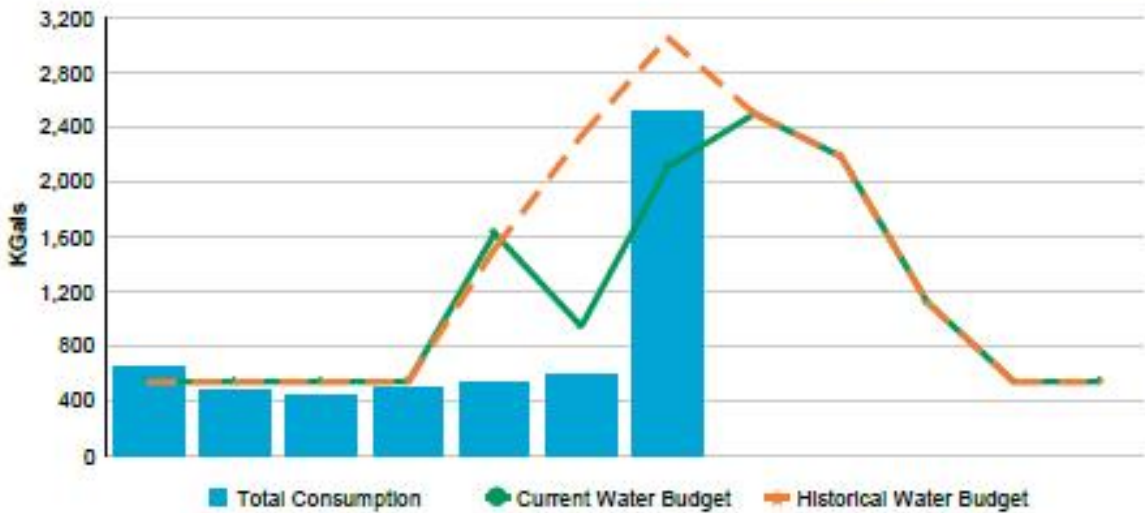


Customer Name:	Example
Address:	
Est. Irrigated Sq.Ft.	622,277

To-Date Gallons Per Sq.Ft.	3.26	GPSF
To Date Allowable Budget	6,870	kgals
To Date Consumption	5,704	kgals

To Date % of Budget	83%
---------------------	-----

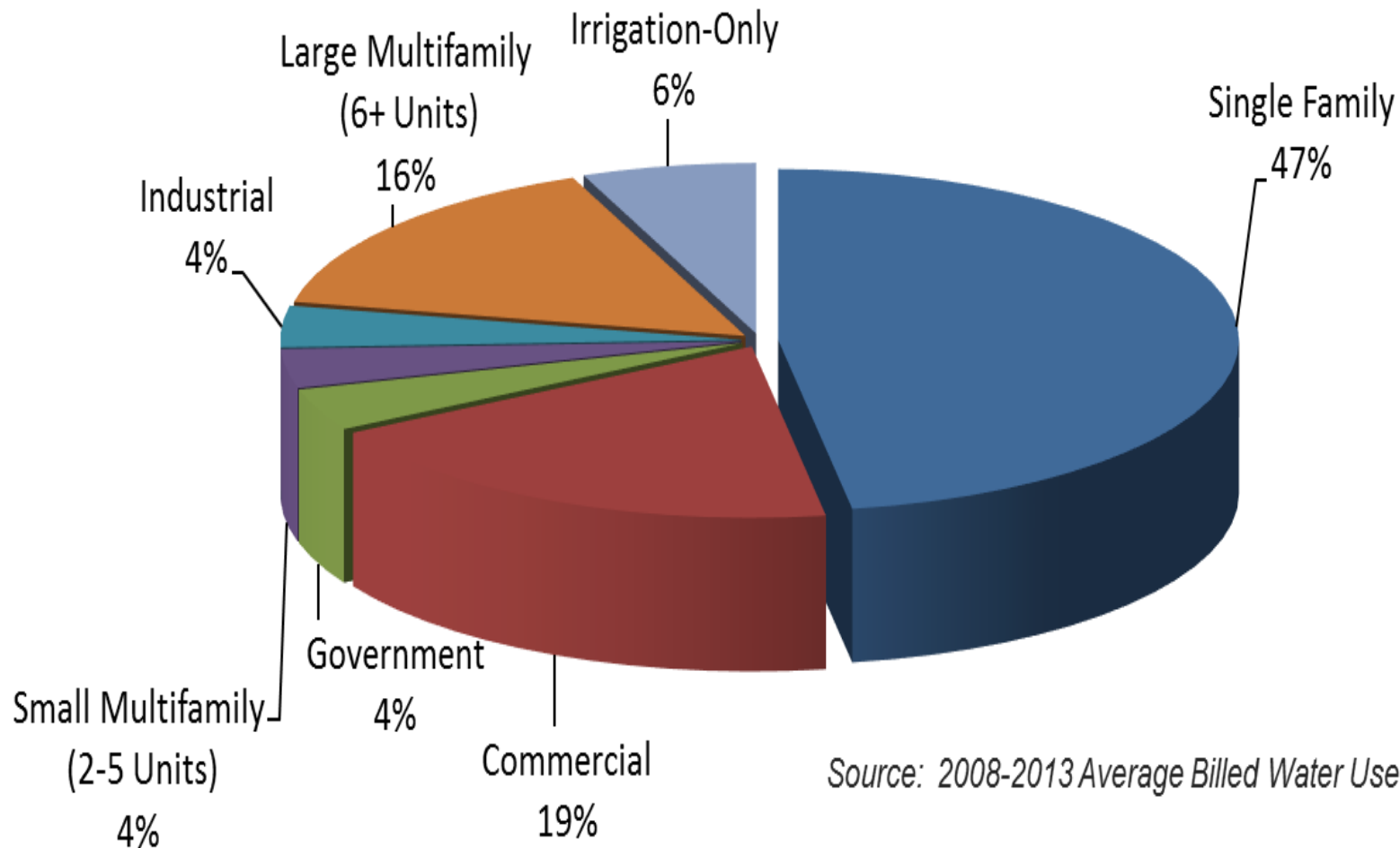
Water Use Categories	kgals	%
Indoor	3,815	56%
Irrigation	3,055	44%
Total	6,870	100%



	1	2	3	4	5	6	7	8	9	10	11	12
Indoor Budget	545	545	545	545	545	545	545	545	545	545	545	545
Total Outdoor Budget	0	0	0	0	1,083	404	1,568	1,954	1,643	579	0	0
Current Water Budget	545	545	545	545	1,628	949	2,113	2,400	2,188	1,124	545	545
Total Consumption	644	474	442	495	533	593	2,523	0	0	0	0	0
% of Monthly Budget	118%	87%	81%	91%	33%	62%	119%	0	0	0	0	0

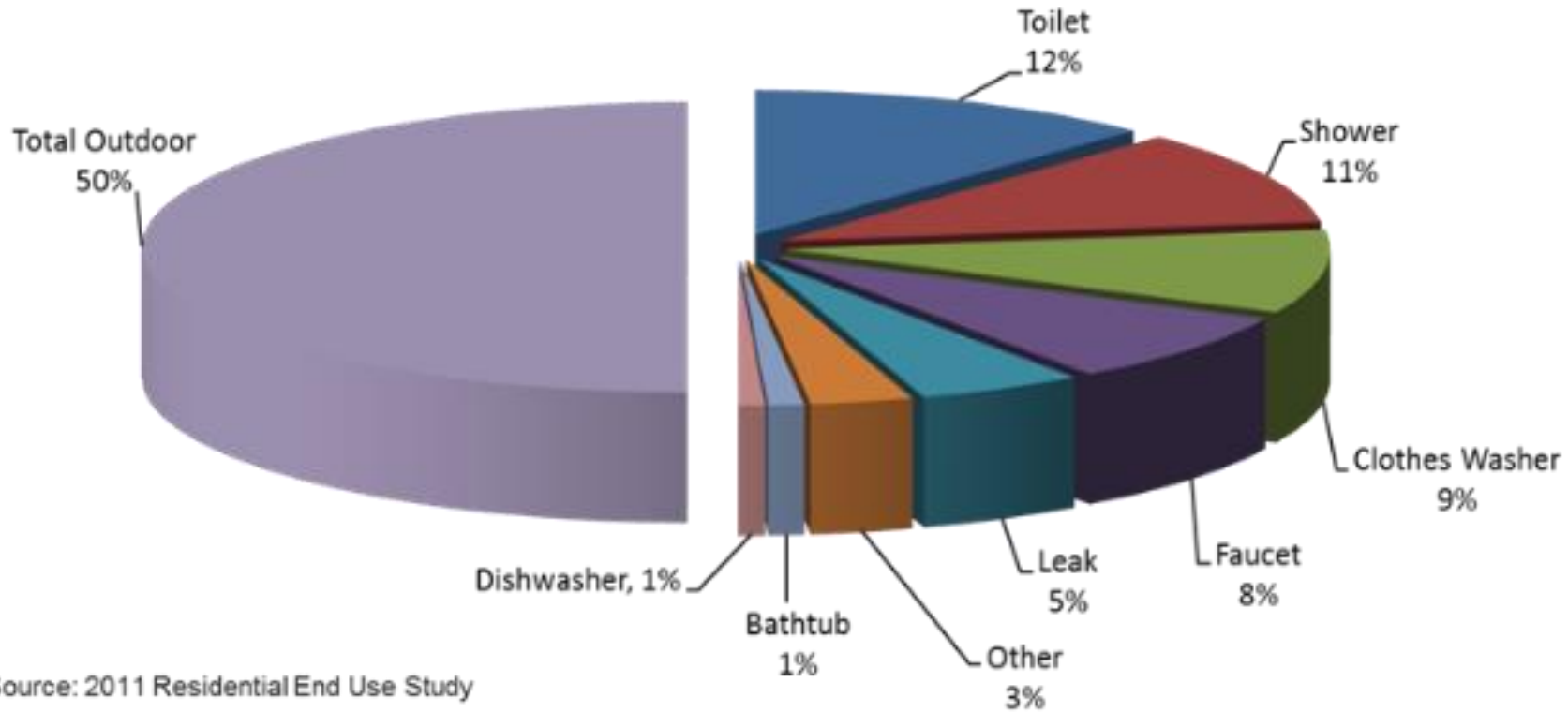
Know Your Business

Denver Water Retail Treated Water Sales



Source: 2008-2013 Average Billed Water Use

Single Family Water Use



Source: 2011 Residential End Use Study

Get Specific







Residential drivers of use

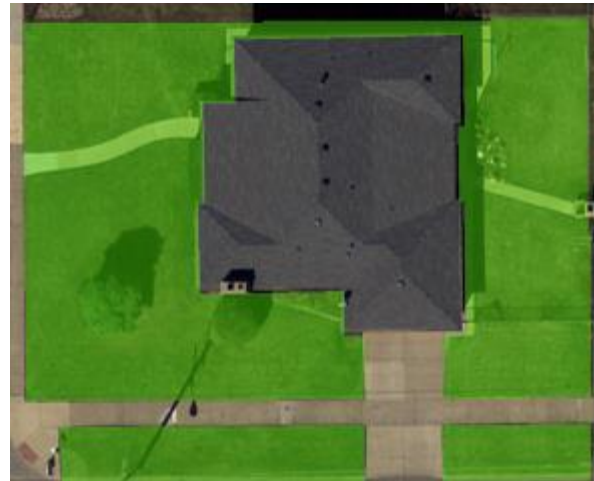
Indoor

- Number of people
- Fixtures
- Appliances
- Behavior



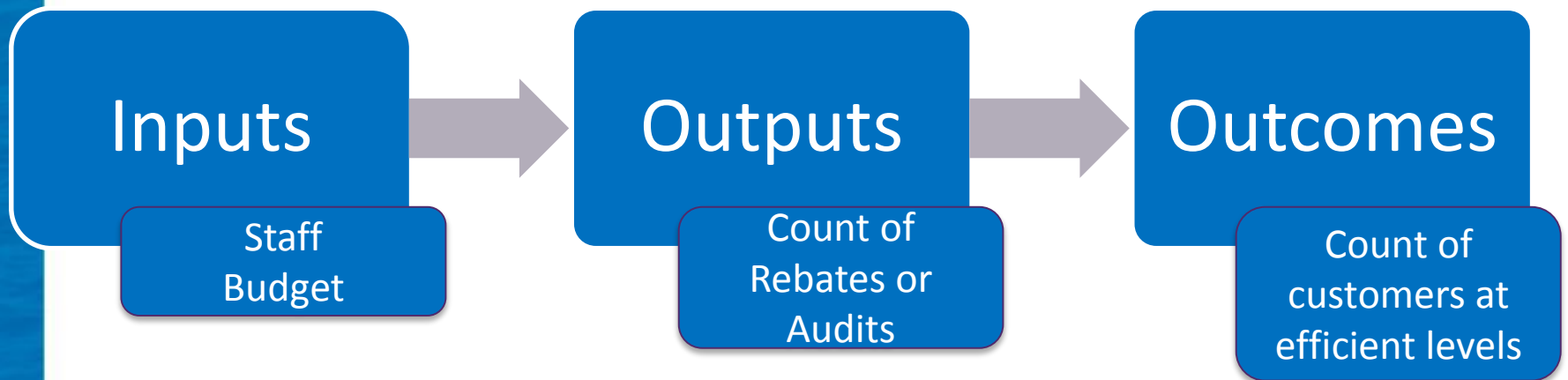
Outdoor

- Area
- Landscape type
- Soil
- Irrigation method



Define Efficient Use

Measuring matters



Moving to efficiency

By measuring efficiency, we recognize customers and our past results.

- Many customers may already be at efficient use levels

Efficiency can be measured and can adapt over time.

- We know that per person water use in a home with current State standard water fixtures is around 40 gallons per day.

Multi Family

GPSF Range	Number of Properties	% of Total
<5	3,823	31%
5-12	3,549	29%
12-18	1,944	16%
18-30	1,651	13%
>30	1,276	10%



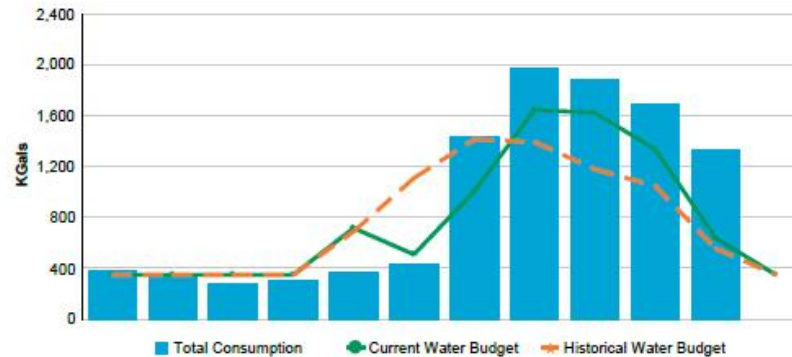


Thank you for participating in the Water Budget Program. The following is your customized water usage profile. This budget identifies the major water uses categories on your property, so that you can monitor water usage and maximize water use efficiency. All irrigation usage is based on the irrigated square footage of your property and weather data specifically collected for the Denver Water service area.

Customer Name:	Customer
Address:	123 Main St.
Est. Irrigated Sq.Ft.	265,648

To-Date Gallons Per Sq.Ft.	25.01	GPSF
To Date Allowable Budget	8,860	kgals
To Date Consumption	10,378	kgals
To Date % of Budget	117%	

Water Use Categories	kgals	%
Indoor	3,834	43%
Irrigation	5,026	57%
Total	8,860	100%



	1	2	3	4	5	6	7	8	9	10	11	12
Indoor Budget	348	348	348	348	348	348	348	348	348	348	348	348
Total Outdoor Budget	0	0	0	0	367	159	656	1,206	1,272	986	290	0
Current Water Budget	348	348	348	348	715	508	1,005	1,645	1,621	1,334	638	348
Total Consumption	378	342	273	302	365	425	1,433	1,969	1,883	1,684	1,324	0
% of Monthly Budget	108%	98%	78%	87%	51%	84%	143%	120%	116%	126%	208%	0

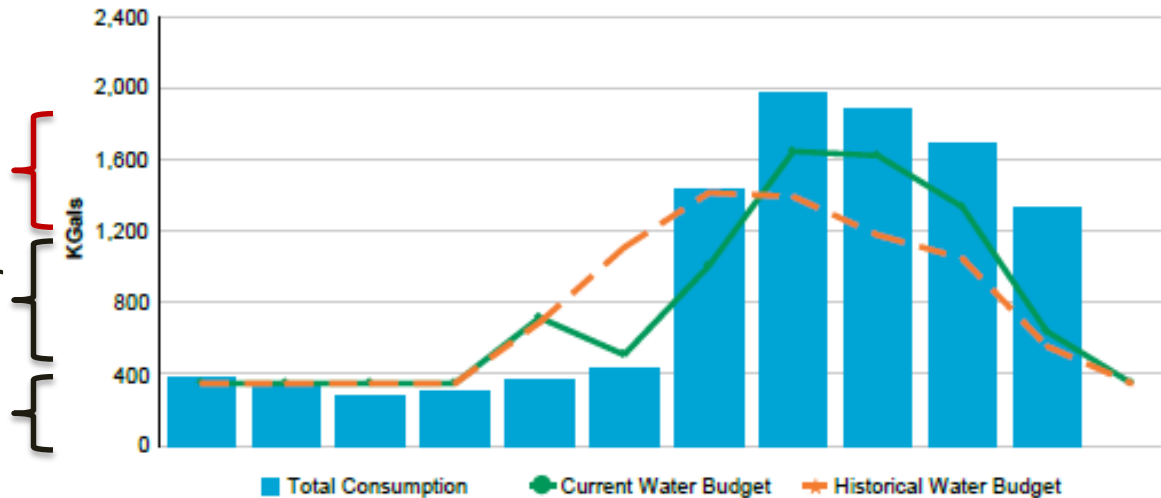
The data in the report above reflects the most up to date data in our billing system at the time that the report was created (see bottom right). If you feel that your report is inaccurate or you have general questions regarding this program contact us at waterbudget@denverwater.org.

Thank you,
Denver Water Conservation Team

Inefficient
Outdoor Usage

Efficient Outdoor
Usage

Indoor Water
Usage



	1	2	3	4	5	6	7	8	9	10	11	12
Indoor Budget	348	348	348	348	348	348	348	348	348	348	348	348
Total Outdoor Budget	0	0	0	0	367	159	656	1,296	1,272	986	290	0
Current Water Budget	348	348	348	348	715	508	1,005	1,645	1,621	1,334	638	348
Total Consumption	378	342	273	302	365	425	1,433	1,969	1,883	1,684	1,324	0
% of Monthly Budget	108%	98%	78%	87%	51%	84%	143%	120%	116%	126%	208%	0

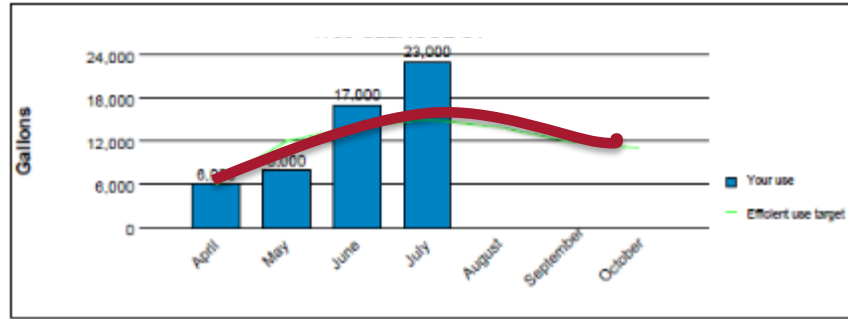
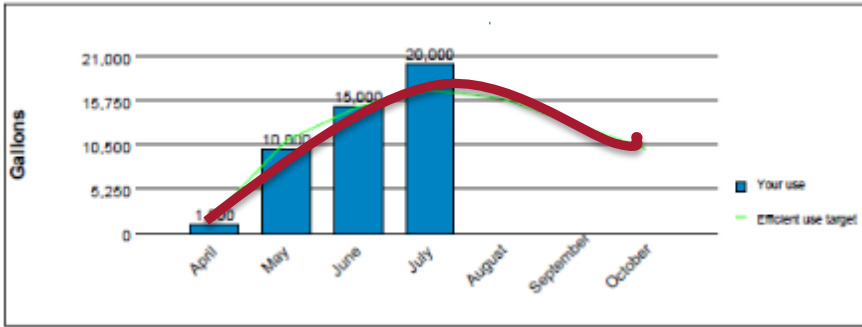
The data in the report above reflects the most up to date data in our billing system at the time that the report was created (see bottom right). If you feel that your report is inaccurate or you have general questions regarding this program contact us at waterbudget@denverwater.org.

Thank you,

Denver Water Conservation Team

Nov 16, 2015

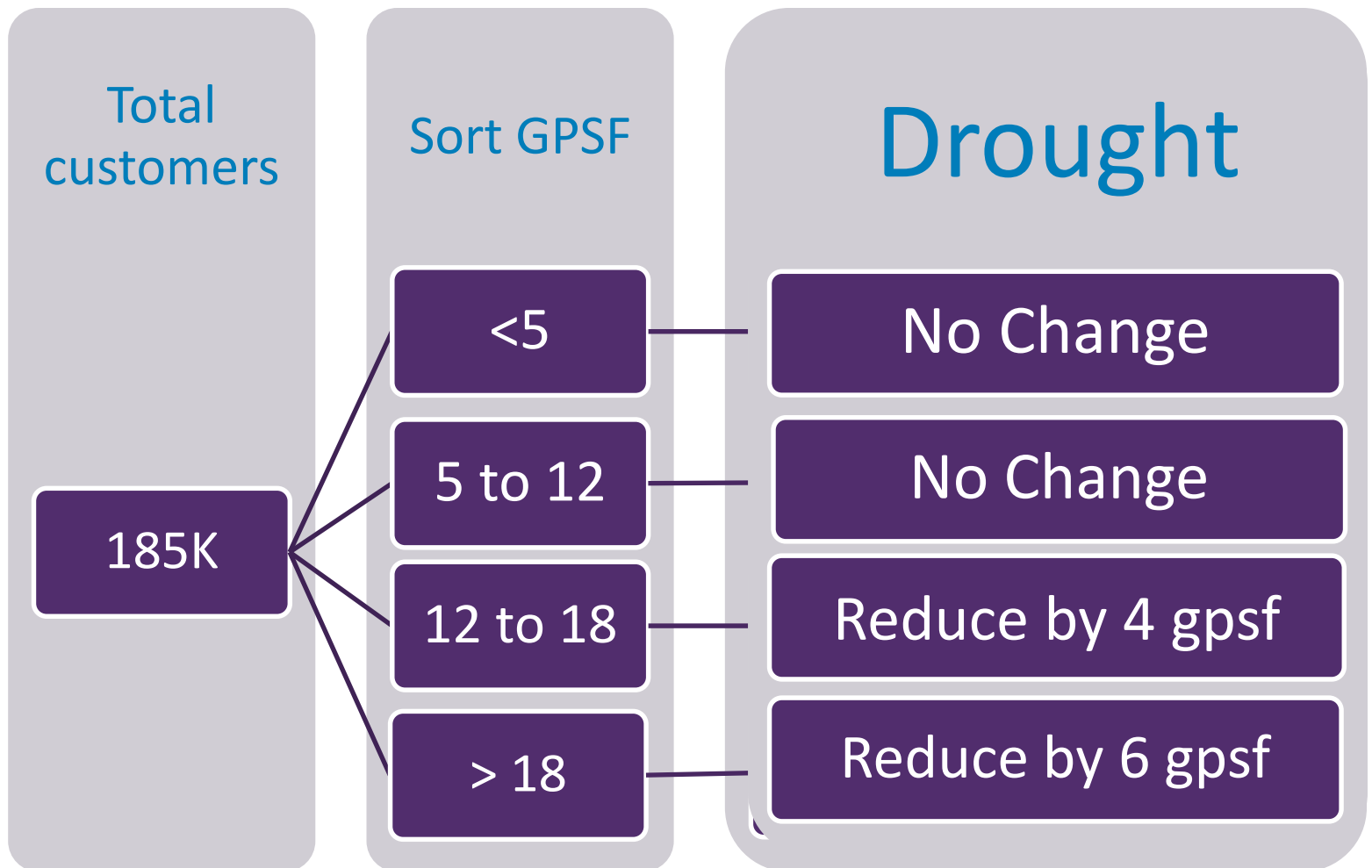
Focused Effort

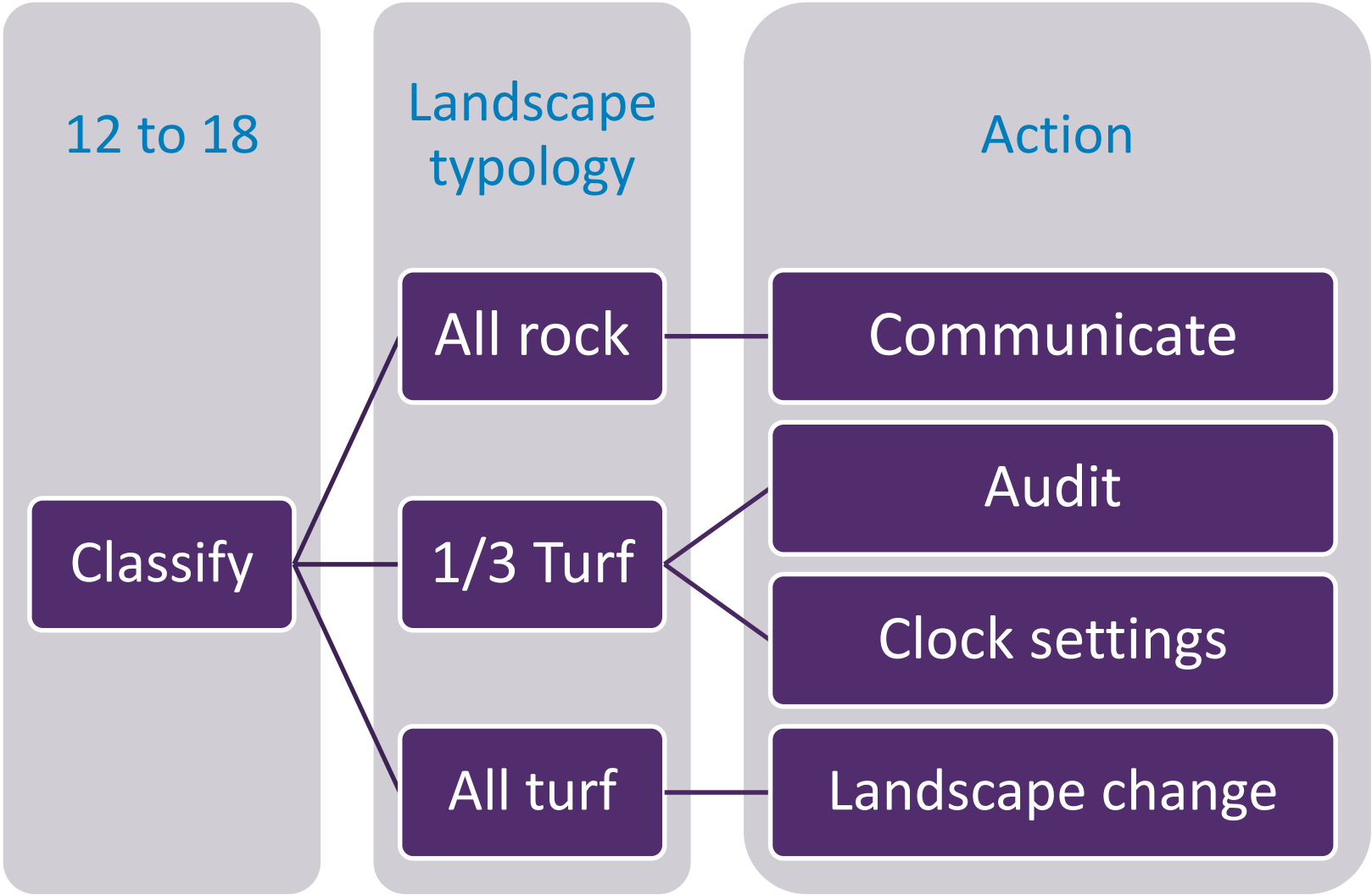


Single Family

GPSF Range	Number of Homes	% of Total
<5	51,500	28%
5-12	66,995	36%
12-18	37,662	20%
18-30	23,134	12%
>30	5,819	3%

Targeted programs





Develop Partners





Grass is dumb. Water 2 minutes less. Your lawn won't notice.

USE ONLY
WHAT YOU
NEED.

 DENVER WATER

Prepare for opportunity

- Know you business
- Know your message
- Get Specific
- Partner up
- Focus



Questions?